IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND and CANCEL claims as follows:

1. (currently amended) An information processing method for sharing storage areas of respective storage apparatuses of a plurality of servers connected to a communication network thereamong, comprising the steps of:

a) registering the storage areas of the respective storage apparatus of the plurality of servers in a management server;

b) managing collectively, in said management server, the respective storage areas of the storage apparatuses of the respective servers thus registered using different storage area usage ways available at a same time, including one or more of a single usage way, an integrated usage way, a multiplicate usage way ~~and~~and/or a divided usage way ~~available at a same time~~;

c) requesting allocation of the storage area of the storage apparatus thus managed;

d) the management server allocating a predetermined one of the storage areas of the storage apparatuses collectively managed in response to the allocation request;

e) requesting the management server to mount the storage area of the storage apparatus thus allocated;

f) the management server mounting the storage area of the storage apparatus allocated in said step d) in response to the mounting request, and transmitting mounting information which indicates this matter as a response;

g) requesting the server, to which said storage area thus mounted belongs, to access said storage area, according to said mounting information thus transmitted; and

h) said server which thus receives the access request accessing the storage area of its own, and transmitting an accessing result as a response.

2. (Original) The information processing method as claimed in claim 1, further comprising the steps of:

i) requesting said management server to unmount the storage area once mounted in said step f); and

j) said management server unmounting said storage area in response to the unmounting request made in said step i).

3. (Cancelled).

4. (Cancelled.

5. (Original) The information processing method as claimed in claim 1, wherein:

the collective management of the registered storage areas of the storage apparatuses in said management server is performed in said step b) in such a manner that the storage areas are managed as virtual storage areas logically.

6. (Original) The information processing method as claimed in claim 1, wherein:

the accessing operation in said step h) comprises at least an initialization operation, information writing operation, information reading operation, an information searching operation and an information deleting operation.

7. (Original) The information processing method as claimed in claim 1, wherein:

said plurality of servers and respective storage apparatuses comprise direct attached storages respectively.

8. (currently amended) An information processing system for sharing storage areas of respective storage apparatuses of a plurality of servers connected to a communication network thereamong, comprising:

a registering part registering the storage areas of the respective storage apparatus of the plurality of servers in a management server;

a managing part managing collectively, in said management server. the respective storage areas of the storage apparatuses of the respective servers thus registered using different storage area usage ways available at a same time, including one or more of a single usage way, an integrated usage way, a multiplicate usage way ~~and~~and/or a divided usage way ~~available at a same time~~;

an allocation requesting part requesting allocation of the storage area of the storage apparatus thus managed;

an allocating part in the management server allocating a predetermined one of the storage areas of the storage apparatuses collectively managed, in response to the allocation request;

a mounting requesting part requesting the management server to mount the storage area of the storage apparatus thus allocated;

a mounting part in the management server mounting the storage area of the storage apparatus allocated in said allocating part in response to the mounting request, and transmitting mounting information which indicates this matter as a response;

an access requesting part requesting the server, to which said storage area thus mounted originally belongs, to access said storage area of its own, according to said mounting information thus transmitted; and

an accessing part in said server which thus receives the access request accessing the storage area of its own, and transmitting a result of the access as a response.

9. (Original) The information processing system as claimed in claim 8, further comprising:

an unmounting requesting part requesting said management server to unmount of the storage area once mounted by said mounting part; and

an unmounting part in said management server unmounting said storage area in response to the unmounting request made by said unmounting requesting part.

10. (Cancelled).

11. (Cancelled).

12. (Original) The information processing system as claimed in claim 8, wherein:

the collective management of the registered storage areas of the storage apparatuses performed by said managing part of the management server is performed in such a manner that the storage areas are managed as virtual storage areas logically.

13. (Original) The information processing system as claimed in claim 8, wherein:

the accessing operation performed by said accessing part comprises at least an initialization operation, an information writing operation, an information reading operation, an information searching operation and an information deleting operation.

14. (Original) The information processing system as claimed in claim 8, wherein:

said plurality of servers and the respective storage apparatuses comprise direct attached storages respectively.

15. (currently amended) An information processing apparatus comprising:

a registering part registering a storage area of its own in a management server connected with a communication network;

a managing part, in said management server, collectively managing registered storage areas of storage apparatuses of respective servers using different storage area usage ways available at a same time, including one or more of a single usage way, an integrated usage way, a multiplicate usage way ~~and~~and/or a divided usage way ~~available at a same time~~;

an allocation requesting part requesting said management server to allocate a storage area managed by said management server; and

a mounting requesting part requesting said management server to mount the storage area of the storage apparatus which has been allocated in response to the allocation request;

an access requesting part requesting, according to mounting information returned from the management server in response to the mounting request, another information processing apparatus which has said storage area mounted by said management server in response to said mounting request, to access said storage area.

16. (Original) The information processing apparatus as claimed in claim 15, further comprising an unmounting requesting part requesting said management server to unmount of the storage area once mounted by said management server according to the mounting request.

17. (Original) The information processing apparatus as claimed in claim 15, wherein:

an access operation requested by said access requesting part comprises at least an initialization operation, an information writing operation, an information reading operation, an information searching operation and an information deleting operation.

18. (Original) The information processing apparatus as claimed in claim 15, comprising a direct attached storage with its own storage apparatus.

19. (currently amended) An information processing apparatus comprising:

a managing part collectively managing storage areas registered, which storage areas belong to storage apparatuses of a plurality of information processing apparatuses connected with a communication network, respectively, using different storage area usage ways available at a same time, including one or more of a single usage way, an integrated usage way, a multiplicate usage way, ~~and~~and/or a divided usage way ~~available at a same time~~;

an allocating part allocating a predetermined one of the storage areas collectively managed by said managing part, in response to an allocation request made by a first information processing apparatus of the plurality of information processing apparatuses; and

a mounting part mounting the storage area of the storage apparatus of a second information processing apparatus of the plurality of information processing apparatuses allocated in response to a mounting request made by said first information processing apparatus, and transmitting mounting information indicating this matter to said first information processing apparatus as a response.

20. (Original) The information processing apparatus as claimed in claim 19, further comprising:

an unmounting part unmounting, in response to an unmounting request given by the first information processing apparatus, the storage area

of the second information processing apparatus once mounted by said mounting part.

21. (Cancelled).

22. (Cancelled).

23. (Original) The information processing apparatus as claimed in claim 19, wherein:

the collective management of the registered storage areas of the storage apparatuses performed by said managing part is performed in such a manner that the storage areas are managed as virtual storage areas logically.

24. (currently amended) A computer readable information recording medium storing therein a program causing a computer to execute the following steps of:

a) registering a storage area of its own storage apparatus in a management server connected with a communication network;

b) managing collectively, in said management server, the respective storage areas of the of the storage apparatuses of the respective servers using different storage area usage ways available at a same time, including one or more of a single usage way, an integrated usage way, a multiplicate usage way, ~~and~~and/or a divided usage way ~~available at a same time~~;

c) requesting said management server to allocate a storage area managed by said management server; and

d) requesting said management server to mount the storage area of the storage apparatus which has been allocated in response to the allocation request;

e) requesting, according to mounting information returned from the management server in response to the mounting request, another information processing apparatus which has said storage area mounted by said management server in response to said mounting request, to access said storage area.

25. (Previously Presented) The computer readable information recording medium as claimed in claim 24, wherein said program further causes the computer to execute the step of:

f) requesting said management server to unmount of the storage area once mounted by said management server according to the mounting request.

26. (Previously Presented) The computer readable information recording medium as claimed in claim 24, wherein:

an access operation requested in said e) comprises at least an initialization operation, an information writing operation, an information reading operation, an information searching operation and an information deleting operation.

27. (Original) The computer readable information recording medium as claimed in claim 24, wherein:

said computer and the storage apparatus thereof comprise a direct attached storage.

28. (currently amended) A computer readable information recording medium storing

therein a program causing a computer to execute the steps of:

a) collectively managing respective storage areas registered, which storage areas belong to storage apparatuses of a plurality of information processing apparatuses connected with a communication network, respectively, using different storage area usage ways available at a same time, including one or more of a single usage way, an integrated usage way, a multiplicate usage way, ~~and~~and/or a divided usage way ~~available at a same time~~;

b) allocating a predetermined one of the storage areas collectively managed in said step a), in response to an allocation request made by a first information processing apparatus 'of the plurality of information processing apparatuses connected with the communication network; and

c) mounting the storage area of the storage apparatus of a second information processing apparatus of the plurality of information processing apparatuses allocated in response to a mounting request made by the first information processing apparatus, and transmitting mounting information

indicating this matter to said first information processing apparatus as a response.

29. (Original) The computer readable information recording medium as claimed in claim 28, wherein said program further causes the computer to execute the step of:

d) unmounting, in response to an unmounting request given by the first information processing apparatus, the storage area of the second information processing apparatus once mounted in said step c).

30. (Cancelled).

31. (Cancelled).

32. (Original) The computer readable information recording medium as claimed in claim 28, wherein:

the collective management of the registered storage areas of the storage apparatuses performed in said step a) is performed in such a manner that the storage areas are managed as virtual storage areas logically.

33. (cancelled)

34. (currently amended) A method, comprising:

registering, in a table of a management server, a plurality of storage usage ways available at a same time and corresponding ~~that correspond~~ to storage areas of storage devices of ~~related~~ servers; and

collectively managing, at the management server, the storage areas of the storage devices for a server according to a ~~using the plurality of~~ storage usage ~~way~~ways ~~available at a same time to allow the servers to share storage devices with other servers~~.